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10/521,574

01/18/2005

Kazumasa Matsuura

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WENDEROTH, LIND & PONACK, L.L.P.
2033 K STREET N. W.
SUITE 800
WASHINGTON, DC 20006-1021

EXAMINER

HARTMANN, GARY S

ART UNIT

PAPER NUMBER

3671

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE | DELIVERY MODE |
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3 MONTHS

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/521,574 | Applicant(s) MATSUURA, KAZUMASA | |
| | Examiner Gary Hartmann | Art Unit 3671 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final. .
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. ____ . |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>5/25/5</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 7, 9, 10, 13-16 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 6, the phrase "or the like" renders the claim indefinite because the claim includes elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim unascertainable. See MPEP § 2173.05(d).

Claims 9, 10 and 18-20 recite the limitation "being to be." It is unclear what meaning these recitations are intended to convey.

Regarding claim 13, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Hammerschlag (U.S. Patent 3,799,021).

Hammerschlag discloses a ring saw driver including a ring saw (1) with an endless strip (4) arranged for driving the saw at an outer periphery thereof (Figure 1, for example).

Hammerschlag discloses a the strip to be a chain. Given a lack of claimed material characteristics, there is no distinction between a chain and a belt in endless strip power transmission systems.

The strip is wound over a plurality of rotary members (18, 19, 20, for example), including a drive pulley. The motor is optionally hydraulic.

Regarding claim 17, the strip is arranged such that interference of the main body with the cutting edge is avoided.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ehlen (U.S. Patent 3,468,351) in view of Mann, Jr. (U.S. Patent 4,481,008).

Ehlen discloses a ring saw driven on the outer periphery (Figure 1) but is not driven by an endless strip. Mann teaches that driving a mechanism by an endless strip (Figure 1, for example) is advantageous because it requires a smaller motor, for example (see 'Background Art,' column

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1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have replaced the sprocket of Ehlen with the endless strip of Mann in order to obtain a more efficient driving system.

Claims 8-12 and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammerschlag or Ehlen/Mann, as applied above, and further in view of Claesson (U.S. Patent 6,374,501).

Hammerschlag and Ehlen do not teach the support members supporting the saw at an inside thereof. Claesson teaches a saw (30) to include support members (42). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the support members of Claesson with the saw of Hammerschlag or Ehlen in order to guide and hold the saw blade, as taught by Claesson.

Hammerschlag is silent regarding changing the position of a rotary member in order to adjust tension. Mann teaches the rotary members to provide tension, but does not specify changing their positions. Belt tensioners are common in endless strip power transmission systems. Claesson, for example, includes a tensioner (45) meeting the claim limitations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have adjusted tension by changing the position of a rotary member in order to prevent slack in the strip, as exemplified by Claesson.

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Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hammerschlag or Ehlen/Mann, as applied above, and further in view of Milbourn (U.S. Patent 4,769,977).

Hammerschlag and Ehlen do not discuss attachment to an arm tip of an excavator; however, it is well known to attach rotary saws in this manner, as exemplified by Milbourn (Figure 4, for example). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have removably attached the devices of Hammerschlag or Ehlen/Mann to an arm tip of an excavator in order to reach areas not easily accessible to other machines, as taught by Milbourn.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary Hartmann whose telephone number is 571-272-6989. The examiner can normally be reached on Tuesday through Friday, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571-272-6998. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Gary Hartmann
Primary Examiner
Art Unit 3671